

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| | |
|--------------------------------|-------------|
| Applicants: Y. Shintani et al. | : Art Unit: |
| Serial No.: To be Assigned | : Examiner: |
| Filed: Herewith | : |
| FOR: COMMUNICATIONS SETTING | : |
| METHOD AND COMMUNICATIONS | : |
| SETTING SYSTEM FOR POWER LINE | |
| COMMUNICATIONS SYSTEM | |

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

S I R :

Prior to examination, please amend the above-identified application as follows:

SPECIFICATION:

Specification at page 4, line 9:

One aspect of the present invention is a communications setting method for a communications network system for performing data communications among a plurality of devices through power line, wherein

Specification at page 4, line 18:

Another aspect of the present invention is the communications setting method, wherein

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Specification at page 5, line 1:

Still another aspect of the present invention is the communications setting method, wherein

Specification at page 5, line 7:

Yet still another aspect of the present invention is the communications setting method, wherein

Specification at page 5, line 13:

Still yet another aspect of the present invention is the communications setting method, wherein

Specification at page 5, line 20:

A further aspect of the present invention is the communications setting method, wherein

Specification at page 6, line 3:

A still further aspect of the present invention is the communications setting method, wherein

Specification at page 6, line 8:

A yet further aspect of the present invention is the communications setting method, wherein

Specification at page 6, line 14:

10075570-021302

A still yet further aspect of the present invention is a communications network system in which data communications is performed among a plurality of devices including a first device and a second device through power line, wherein

Specification at page 7, line 6:

An additional aspect of the present invention is a device connected to a communications network system which performs data communications through power line, wherein

Specification at page 7, line 13:

A still additional aspect of the present invention is the device, wherein

Specification at page 7, line 18:

A yet additional aspect of the present invention is the device, wherein

Specification at page 8, line 1:

A still yet additional aspect of the present invention is the device, wherein

Specification at page 8, line 5:

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A supplementary aspect of the present invention is a device connected to a communications network which performs data communications through power line, wherein

Specification at page 8, line 12:

A still supplementary aspect of the present invention is the device, wherein

Specification at page 8, line 17:

A yet supplementary aspect of the present invention is the device, wherein

Specification at page 8, line 22:

A still yet supplementary aspect of the present invention is the device, wherein

Specification at page 9, line 5:

Another aspect of the present invention is the device, wherein

Specification at page 9, line 10:

Still another aspect of the present invention is a method of transferring a master function of a device connected to a communications network system which performs data communications among a plurality of devices through power line, wherein

Specification at page 10, line 8:

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Yet still another aspect of the present invention is the method of transferring a master function of a device, wherein

Specification at page 10, line 14:

Still yet another aspect of the present invention is a communications network system which performs data communications through power line among a plurality of devices including a first device and a second device having a terminal address and a master function of setting a house code or a terminal address, wherein

Specification at page 11, line 12:

A further aspect of the present invention is a device which has a master function, and is connected to a communications network system which performs data communications through power line, wherein

Specification at page 11, line 23:

A still further aspect of the present invention is the device, wherein

Specification at page 12, line 6:

A yet further aspect of the present invention is the device, wherein

Specification at page 12, line 12:

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A still yet further aspect of the present invention is the device,
wherein

Specification at page 12, line 17:

An additional aspect of the present invention is a device which
has a master function and is connected to a communications network system,
wherein

Specification at page 13, line 6:

A still additional aspect of the present invention is the device,
wherein

Specification at page 13, line 11:

A yet additional aspect of the present invention is the device,
wherein

Specification at page 13, line 15:

A still yet additional aspect of the present invention is a device
connected to a communications network system which performs data
communications among a plurality of devices through power line, wherein

Specification at page 14, line 1:

A supplementary aspect of the present invention is the device,
wherein

Specification at page 14, line 10:

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A still supplementary aspect of the present invention is a program of causing a computer to realize a function of transmitting a house code notification including a house code more than once in a predetermined time period.

Specification at page 14, line 14:

A yet supplementary aspect of the present invention is a program of causing a computer to realize a function of obtaining a house code when a house code notification including the house code is received successively at predetermined times in a predetermined time period.

Specification at page 14, line 19:

A still yet supplementary aspect of the present invention is a computer processable medium bearing the program.

Specification at page 14, line 22:

Another aspect of the present invention is a computer processable medium bearing the program.

CLAIMS:

1. (Amended) A communications setting method for a communications network system for performing data communications among a plurality of devices through power line, comprising the steps of:

a house code notification including a house code to be uniquely set for the communications network system is transmitted from a first device in the communications network system to a second device in the communications network system more than once in a first predetermined time period.

10. (Amended) A device connected to a communications network system which performs data communications through a power line, comprising

a house code notification including a house code to be uniquely set for the communications network system is transmitted more than once in a predetermined time period to a second device connected to the communications network system.

14. (Amended) A device connected to a communications network which performs data communications through a power line, comprising

a house code notification including a house code to be uniquely set for the communications network system is received from another device connected to the communications network system.

19. (Amended) A method of transferring a master function of a device connected to a communications network system which performs data communications among a plurality of devices through a power line, comprising the steps of:

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the master function is to set a house code or a terminal address to another device;

a first device having the master function and an address table holding terminal addresses which can be assigned to other devices transmits the address table to a second device when the first device receives from the second device an address table transmission request indicating a transmission request of the address table,

upon receipt of the address table, the second device retrieves from the address table an unused address which can be assigned as a terminal address to the first device, and transmits to the first device a request to change a terminal address into the unused address and a request to invalidate the master function; and

the second device enables its own master function when the first device changes its own terminal address into the unused address, and invalidates the master function.

21. (Amended) A communications network system which performs data communications through a power line among a plurality of devices including a first device and a second device comprising a terminal address and a master function of setting a house code or a terminal address,

the first device comprises means of holding an address table which holds terminal addresses assignable to other devices, means of receiving an address table transmission request to transmit the address table, and means of transmitting the address table;

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the second device comprises means of transmitting the address table transmission request, means of receiving the address table, means of retrieving from the address table received by means of receiving an unused address which can be assigned as a terminal address to another device, and means of transmitting a request to change the terminal address into the unused address and a request to invalidate the master function; and

the second device enables its own master function when the first device changes the terminal address into the unused address and invalidates the master function.

22. (Amended) A device which has a master function, and is connected to a communications network system which performs data communications through a power line, comprising

the master function is to set a house code or a terminal address to another device and

the device comprises means of storing an address table holding terminal addresses assignable to other devices, means of receiving an address table transmission request to transmit the address table, and means of transmitting the address table at the address table transmission request.

26. (Amended) A device which has a master function and is connected to a communications network system, comprising

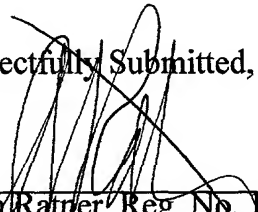
the master function is to set a house code or a terminal address to another device; and the device comprises:

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means of obtaining an address table holding terminal addresses assignable to other devices; and

means of extracting a terminal address assignable to another device from the address table, and transmitting the terminal address, a request to change into the terminal address, and a request to invalidate a master function of another device having the master function.

Respectfully Submitted,


Allan Ratner, Reg. No. 19,717
Attorney for Applicants

AR/dlm
Enclosure: Version with Markings to Show Changes Made

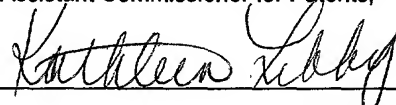
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Kathleen Libby

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

SPECIFICATION:

Specification at page 4, line 9:

~~The 1st invention~~ One aspect of the present invention is a communications setting method for a communications network system for performing data communications among a plurality of devices through power line, wherein

Specification at page 4, line 18:

~~The 2nd invention~~ Another aspect of the present invention is the communications setting method ~~according to 1st invention~~, wherein

Specification at page 5, line 1:

~~The 3rd invention~~ Still another aspect of the present invention is the communications setting method ~~according to 1st invention~~, wherein

Specification at page 5, line 7:

~~The 4th invention~~ Yet still another aspect of the present invention is the communications setting method ~~according to 3rd invention~~, wherein

Specification at page 5, line 13:

~~The 5th invention~~ Still yet another aspect of the present invention is the communications setting method ~~according to 3rd invention~~, wherein

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Specification at page 5, line 20:

~~The 6th invention~~ A further aspect of the present invention is the communications setting method ~~according to 5th invention~~, wherein

Specification at page 6, line 3:

~~The 7th invention~~ A still further aspect of the present invention is the communications setting method ~~according to 1st invention~~, wherein

Specification at page 6, line 8:

~~The 8th invention~~ A yet further aspect of the present invention is the communications setting method ~~according to 1st invention~~, wherein

Specification at page 6, line 14:

~~The 9th invention~~ A still yet further aspect of the present invention is a communications network system in which data communications is performed among a plurality of devices including a first device and a second device through power line, wherein

Specification at page 7, line 6:

~~The 10th invention~~ An additional aspect of the present invention is a device connected to a communications network system which performs data communications through power line, wherein

Specification at page 7, line 13:

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~~The 11th invention~~ A still additional aspect of the present invention is the device according to 10th invention, wherein

Specification at page 7, line 18:

~~The 12th invention~~ A yet additional aspect of the present invention is the device according to 10th invention, wherein

Specification at page 8, line 1:

~~The 13th invention~~ A still yet additional aspect of the present invention is the device according to 10th invention, wherein

Specification at page 8, line 5:

~~The 14th invention~~ A supplementary aspect of the present invention is a device connected to a communications network which performs data communications through power line, wherein

Specification at page 8, line 12:

~~The 15th invention~~ A still supplementary aspect of the present invention is the device according to 14th invention, wherein

Specification at page 8, line 17:

~~The 16th invention~~ A yet supplementary aspect of the present invention is the device according to 15th invention, wherein

Specification at page 8, line 22:

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~~The 17th invention~~ A still yet supplementary aspect of the
present invention is the device ~~according to 15th invention~~, wherein

Specification at page 9, line 5:

~~The 18th invention~~ Another aspect of the present invention is the
device ~~according to 14th invention~~, wherein

Specification at page 9, line 10:

~~The 19th invention~~ Still another aspect of the present invention is
a method of transferring a master function of a device connected to a
communications network system which performs data communications among
a plurality of devices through power line, wherein

Specification at page 10, line 8:

~~The 20th invention~~ Yet still another aspect of the present
invention is the method of transferring a master function of a device ~~according~~
~~to 19th invention~~, wherein

Specification at page 10, line 14:

~~The 21st invention~~ Still yet another aspect of the present
invention is a communications network system which performs data
communications through power line among a plurality of devices including a
first device and a second device having a terminal address and a master
function of setting a house code or a terminal address, wherein

Specification at page 11, line 12:

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~~The 22nd invention~~ A further aspect of the present invention is a device which has a master function, and is connected to a communications network system which performs data communications through power line, wherein

Specification at page 11, line 23:

~~The 23rd invention~~ A still further aspect of the present invention is the device ~~according to 22nd invention~~, wherein

Specification at page 12, line 6:

~~The 24th invention~~ A yet further aspect of the present invention is the device ~~according to 23rd invention~~, wherein

Specification at page 12, line 12:

~~The 25th invention~~ A still yet further aspect of the present invention is the device ~~according to 22nd invention~~, wherein

Specification at page 12, line 17:

~~The 26th invention~~ An additional aspect of the present invention is a device which has a master function and is connected to a communications network system, wherein

Specification at page 13, line 6:

~~The 27th invention~~ A still additional aspect of the present invention is the device ~~according to 26th invention~~, wherein

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Specification at page 13, line 11:

~~The 28th invention~~ A yet additional aspect of the present invention is the device according to 27th invention, wherein

Specification at page 13, line 15:

~~The 29th invention~~ A still yet additional aspect of the present invention is a device connected to a communications network system which performs data communications among a plurality of devices through power line, wherein

Specification at page 14, line 1:

~~The 30th invention~~ A supplementary aspect of the present invention is the device according to 29th invention, wherein

Specification at page 14, line 10:

~~The 31st invention~~ A still supplementary aspect of the present invention is a program of causing a computer to realize a function of transmitting a house code notification including a house code more than once in a predetermined time period.

Specification at page 14, line 14:

~~The 32nd invention~~ A yet supplementary aspect of the present invention is a program of causing a computer to realize a function of obtaining a house code when a house code notification including the house code is received successively at predetermined times in a predetermined time period.

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Specification at page 14, line 19:

~~The 33rd invention~~ A still yet supplementary aspect of the
present invention is a computer processable medium bearing the program
~~according to 31st invention.~~

Specification at page 14, line 22:

~~The 34th invention~~ Another aspect of the present invention is a
computer processable medium bearing the program ~~according to 32nd~~
~~invention.~~

CLAIMS:

1. (Amended) A communications setting method for a
communications network system for performing data communications among a
plurality of devices through power line, ~~wherein~~ comprising the steps of:

a house code notification including a house code to be uniquely
set for the communications network system is transmitted from a first device in
the communications network system to a second device in the communications
network system more than once in a first predetermined time period.

10. (Amended) A device connected to a communications
network system which performs data communications through a power line,
~~wherein~~ comprising

a house code notification including a house code to be uniquely set for the communications network system is transmitted more than once in a predetermined time period to a second device connected to the communications network system.

14. (Amended) A device connected to a communications network which performs data communications through a power line, ~~wherein~~ comprising

a house code notification including a house code to be uniquely set for the communications network system is received from another device connected to the communications network system.

19. (Amended) A method of transferring a master function of a device connected to a communications network system which performs data communications among a plurality of devices through a power line, ~~wherein~~ comprising the steps of:

the master function is to set a house code or a terminal address to another device;

a first device having the master function and an address table holding terminal addresses which can be assigned to other devices transmits the address table to a second device when the first device receives from the second device an address table transmission request indicating a transmission request of the address table,

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upon receipt of the address table, the second device retrieves from the address table an unused address which can be assigned as a terminal address to the first device, and transmits to the first device a request to change a terminal address into the unused address and a request to invalidate the master function; and

the second device enables its own master function when the first device changes its own terminal address into the unused address, and invalidates the master function.

21. (Amended) A communications network system which performs data communications through a power line among a plurality of devices including a first device and a second device having comprising a terminal address and a master function of setting a house code or a terminal address, ~~wherein~~

the first device comprises means ~~for~~of holding an address table which holds terminal addresses assignable to other devices, means ~~for~~of receiving an address table transmission request to transmit the address table, and means ~~for~~of transmitting the address table;

the second device comprises means ~~for~~of transmitting the address table transmission request, means ~~for~~of receiving the address table, means ~~for~~of retrieving from the address table received by means ~~for~~of receiving an unused address which can be assigned as a terminal address to another device, and means ~~for~~of transmitting a request to change the terminal

address into the unused address and a request to invalidate the master function;
and

the second device enables its own master function when the first device changes the terminal address into the unused address and invalidates the master function.

22. (Amended) A device which has a master function, and is connected to a communications network system which performs data communications through a power line, ~~wherein~~comprising

the master function is to set a house code or a terminal address to another device and

the device comprises means ~~for~~of storing an address table holding terminal addresses assignable to other devices, means ~~for~~of receiving an address table transmission request to transmit the address table, and means ~~for~~of transmitting the address table at the address table transmission request.

26. (Amended) A device which has a master function and is connected to a communications network system, ~~wherein~~comprising

the master function is to set a house code or a terminal address to another device; and the device comprises:

means ~~for~~of obtaining an address table holding terminal addresses assignable to other devices; and

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means ~~for~~of extracting a terminal address assignable to another device from the address table, and transmitting the terminal address, a request to change into the terminal address, and a request to invalidate a master function of another device having the master function.

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